

ASSESSMENT REPORT

1050-08-1

MACTUNG

PREPARED BY

DIAND TECHNICAL SERVICES

MARCH, 1994

105O-08-1

MACTUNG

LOCATION

Latitude: 63° 16'51"N

Longitude: 130° 08'54"W

The exploration site is located approximately 185km northeast of the village of Ross River off the North Canal Road. The site located in the Selwyn Mountains, is approximately 8km northwest of the North Canal Road on the border with the Northwest Territories.

The site is approximately 1950m above sea level.

Site maps showing the location of the site are attached as Appendix A to this report.

WORK HISTORY

A work history has been compiled from the Department of Indian Affairs and Northern Development Minfile record 105O 002. A summary of the work history follows.

July, 1962 - Discovered and staked by Amax Exploration Ltd. (through a subsidiary, Southwest Potash Corporation).

1963 - Amax carried out mapping and trenching.

1964 - Amax carried out more mapping and trenching.

1967 - Amax carried out mapping and trenching.

1968 - Amax drilled 1416.4m in 5 holes.

1970 - A tote road was constructed to the site.

1971 - The property was transferred to Amax Potash Ltd. 2370.1m of drilling was completed in 22 holes.

1972 - The property was transferred to Amax Northwest Mining Co. Ltd. which took the claims to lease. 6954.3m of drilling was completed in 48 holes.

1973 - A 74.7m adit was excavated, drilled 1652.9m from 43 underground holes, drove a 27.4m raise, and shipped a 295 tonne sample to Colorado for metallurgical tests. Tye Lake Resources Ltd. and Saxon Industries Ltd. added the Ken claims to the west and south, and S. Belzburg added 400 Shale, Ache, etc. claims to the northeast and southwest. Belzburg conducted a magnetic survey.

1974-1976 - Environmental and feasibility studies were conducted. Belzburg optioned 109 claims in December, 1974 to Regency Resources Ltd. and Groton Minerals Ltd. Following a geochemical survey and mapping program, the Ken group was optioned in 1974 and 1975 by Canada Tungsten Mining Corporation which explored with magnetic surveys in 1974 and 567.2m from 2 holes in 1975.

1977 - Legal surveys were completed.
 1979 - Underground drilling and a 91 tonne metallurgical sample was shipped.
 1980 - 300m of drilling from 2 holes was completed.
 1981 - Surface surveys and engineering studies were completed. Lorcan Resources Ltd. purchased the Ken group.
 1982 - Surface surveys and engineering studies were completed.
 1983 - Underground exploration was completed.
 1984 - A180 tonne underground sample was collected.
 1985 - Surface surveys and engineering studies were completed along with road construction.
 1986 - The property was sold to Canada Tungsten Mining Corporation.
 August, 1987 - Canada Tungsten staked Buck claims on the northwest side of the claim.
 September, 1989 - One of the original claims was restaked as Wasteful.

CLAIMS STATUS

Status of mineral claims including claim names and numbers, claim expiry dates, and current owners in the vicinity of the Mactung site have been noted as of 1992/03/31 as follows;

<u>CLAIM NAME/NUMBERS</u>	<u>EXPIRY DATE</u>	<u>OWNER</u>
Pat 1-8, 17-26	May 9, 1992	Amax Northwest Mining Co. Ltd.
Border 1-10	May 9, 1992	Amax Northwest Mining Co. Ltd.
Betty 1-20	July 25, 2004	Amax Northwest Mining Co. Ltd.
Pit 1-8	July 25, 2004	Amax Northwest Mining Co. Ltd.
Par 1-24	July 25, 2004	Amax Northwest Mining Co. Ltd.
Gull 1-7	July 25, 2004	Amax Northwest Mining Co. Ltd.
Dawn 1-8	July 25, 2004	Amax Northwest Mining Co. Ltd.

The major commodity identified at this site is tungsten. Copper is identified as a minor commodity.

Scheelite occurs in five separate skarn horizons formed from the limy layers in a 300m thick sequence of Lower Cambrian phyllite near the margin of a Cretaceous stock. The lowest zone occurs in a lens of limestone slump breccia surrounded by phyllite. The upper zone appears to be conformable with overlying black shale of the Ordovician to Lower Devonian Road River formation. The skarn zones are separated by hornfelsed

argillite, quartzite, and minor conglomerate. The two lower zones consist of scheelite, pyrrhotite and calcopyrite and minor molybdenite and garnet in dark green diopside skarn.

CURRENT SITE CONDITIONS

The Mactung exploration site is accessible from an 8km road trending northwest off the North Canal Road. The road is over a rolling mountain ridge from the Northwest Territories to the site, just across the border in the Yukon Territory. The road is accessible to two wheel drive vehicles after the seasonal snow has melted off the road. This road is entirely above treeline.

Site photographs showing current site conditions are attached as Appendix B to this report.

The site is above treeline, and is covered with short grasses and alpine vegetation below the exploration site. At the exploration site the vegetation is limited to lichens attached to the fractured rock in the area.

The exploration site is near the base of a talus slope. A detailed description of geologic conditions has been outlined in the previous section.

The only surface water in the area is from local snowmelt. No year round streams are close to the site.

Physical development since the site was discovered 32 years ago includes road construction, trenching, drilling, bulk sampling and development of an adit. Remains from past activity at this site includes;

- exploration trails,
- a waste rock pile downslope of the adit measuring about 80m long, 10m wide, and up to 5m deep,
- one 3x9m ATCO trailer,
- one 10.4x 18.3m wood frame, plywood clad core storage building full of rock core,
- one 4x5m wood frame, plywood clad generator building with 23 empty 204 litre barrels stored inside,
- loading dock,
- metal frame and chute (sampling tower),
- metal frame and wooden ore storage bins measuring 8x24m,
- 5 pieces of 50mm diameter, 6.1m long pipe,
- 2 pieces of 100mm diameter, 6.1m long pipe,
- one propane tank, and
- adit (entrance was covered in snow at time of inspection on 1993/07/27).

The predominant features of this development is the road up the valley, the exploration trails on the steep mountain slope, and buildings constructed and used during the

exploration. An adit has been developed at this sit, however the entrance was still covered from the annual snow. It can be assumed that this adit is always covered by snow unless the access is machine cleared.

The road to the site was well constructed with minimal disturbance to the surrounding terrain. Some mass wasting of material down the mountain slope has occurred above the adit area. This was caused by excavating material out of the mountainside and spilling it downslope to make a level driving surface for equipment. This has caused minimal damage as the material is broken rock and the area disturbed is quite small. Little vegetation seems to grow at this site as most of it is covered by snow most of the year. No terrain instability was apparent at the time of inspection on 1993/07/27.

The only other site disturbance is from the buildings and equipment left near the adit. The site surrounding the adit has been levelled to provide an adequately sized work area, sample storage area, and room for buildings. As noted above, rock waste from the adit has been piled downslope of the adit. This waste rock is basically an extension of the working area.

RECOMMENDATIONS

The most impact from development of this site is the surface disturbance that has been caused by the road construction, surface exploration areas above the adit, and levelled areas around the adit. However, it was observed that the roads were constructed with minimal surface disturbance causing little damage to the surrounding environment. It is recommended that the roads be left intact to provide access to the area.

The surface exploration above the adit has resulted in minimal impact on the environment. Even though "sidecasting" techniques were used spilling fill down the mountain slopes, this has caused limited damage to the environment. The material at this site is generally bare rock and there was very little vegetation to damage. The only improvement that could be made is to reshape the benching that was constructed. This is not recommended for this very remote site.

The adit appears to be covered by snow year round and is inaccessible. It is recommended that no additional work be undertaken to verify conditions of the adit.

The site surrounding the buildings has been cleaned up and left in good condition. The core is stored inside a building, all empty barrels have been stored inside the generator building, and little other material has been left scattered around the site. Unless the infrastructure is totally removed from the site it is recommended that this site could be left in its present condition.

If a general site clean-up was undertaken it should be done according to the following priorities;

1. remove the propane tank,
2. remove the barrels,
3. gather and remove all remaining metal including the sampling tower,
4. remove the core to another location off-site,
5. remove the ATCO trailer and dismantle the other buildings, removing the material,
6. gather any remaining wood waste and burn in an appropriate location.

This work as described above is considered to be a **LOW** priority.

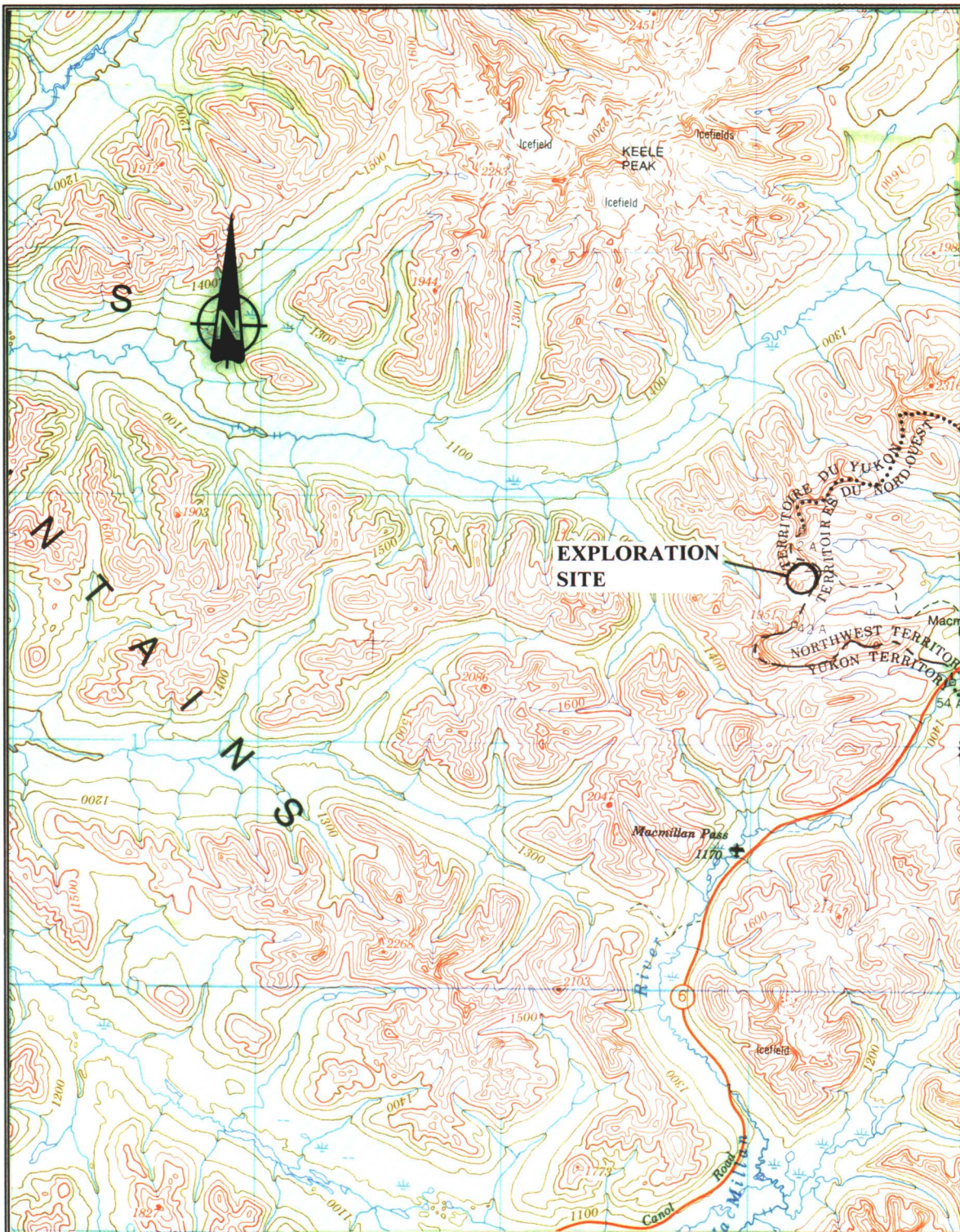
SUMMARY

The most significant environmental damage at this site occurred from the road and drill site construction. The impact on the environment from this activity is considered **LOW** and there does not appear to be any resulting stability or erosion problems. Revegetating the roads, drill sites, and trenching sites is not recommended.

The site has been cleaned-up and very little has been left to remove. If a total clean-up is undertaken then it is recommended that this be completed in the order that has been provided above. However, this work is considered a **LOW** priority.

APPENDIX A

SITE LOCATION MAPS



SITE NAME: **MACTUNG**

SITE NUMBER: **1050-08-1**

MAP NUMBER: **1050**

MAP NAME: **NIDDERY LAKE**

MAP SCALE: **1:250000**

SITE LOCATION:

LATITUDE: **63° 16'51"**

LONGITUDE: **130° 08'54"**



SITE NAME: **MACTUNG**

SITE NUMBER: **1050-08-1**

AIRPHOTO NUMBER: **A24762-1** YEAR: **1977**

AIRPHOTO SCALE: **1:66000**

SITE LOCATION: LATITUDE: **63° 16'51"**

LONGITUDE: **130° 08'54"**

APPENDIX B

SITE PHOTOGRAPHS



ACCESS TO EXPLORATION SITE



OFFICE TRAILER AND CORE STORAGE BUILDING



SAMPLING TOWER, ORE BINS, AND GENERATOR BUILDING



ORE STORAGE BINS



GENERATOR BUILDING



ACCESS ROAD FROM SITE